# 510K) Summary of Safety and Effectiveness

FEB 1 4 2012

This summary of 510k safety and effectiveness is being submitted in according with 21CFR part 807.92

**Submitter:** Edan Instruments, Inc

3/F - B, Nanshan Medical

Equipments Park, Nanhai Rd 1019#,

shekou, Nanshan Shenzhen,

518067 P.R. China Tel: 86-755-26882220 Fax:86-755-26882223

Contact person: Jiang Yucai

Proprietary Name: Vital Signs Monitor Models M3 and M3A

Classification Name: 21 CFR 870.1130 Noninvasive blood pressure measurement system

21 CFR 870.2700, Oximeter

21 CFR 880.2910 Clinical electronic thermometer

Product code: DQA, DXN, FLL

Classification: Class II

### **Predicate Devices:**

| Manufacturer             | Predicate Device | 510(k) # |
|--------------------------|------------------|----------|
| EDAN INSTRUMENTS, INC.   | М3,М3А           | K102835  |
| RADIANT INNOVATION, INC. | THP59J           | K111637  |

#### **Device Description:**

M3 and M3A Vital Signs Monitor is a patient monitoring device providing the patient with a continuous vital physiological monitoring of non-invasive continuous monitoring of SpO2 (oxygen saturation of the blood), NIBP (non-invasive blood pressure) and TEMP (temperature). in a hospital, hospital type facilities environment and intra-hospital moves. The following lists the detailed features of the subject device.

- LCD or LED display
- SpO2, Pulse Rate NIBP and fast TEMP measurement
- · Infrared ear temperature measurement
- Nellcor or EDAN SpO2 module
- Display numeric and waveform information simultaneously
- Nurse call feature
- Built-in Lithium-ion Battery

- Suitable for adult, pediatric and neonate patients
- Visual and audible alarm
- Trend graph review and record
- USB data storage and review
- Wired and wireless network capability

#### Comparison with predicate device

| Monitoring unctions | Subject device | Predicated device |
|---------------------|----------------|-------------------|
| SpO2                | yes            | yes               |
| Pulse Rate          | yes            | yes               |
| Alarm feature       | yes .          | yes               |
| NIBP                | yes            | yes               |
| Temperature         | yes            | yes               |

#### Intended Use:

The Vital Signs Monitor models M3 and M3A (hereinafter called monitor) is intended to be used for non-invasive continuous monitoring of SpO2 (oxygen saturation of the blood), NIBP (non-invasive blood pressure) and TEMP (temperature).

The monitor is intended to be used only under regular supervision of clinical personnel. It is applicable to adult, pediatric, and neonatal usage in hospitals, hospital type facilities and intra-hospital moves.

The monitor is equipped with alarms that indicate system faults (such as loose or defective electrodes), physiologic parameters that have exceeded the limits set by the operator, or both

#### Test Summary:

The following quality assurance measures were applied to the development of the Vital Signs Monitor Models M3 and M3A:

- Software testing
- Safety testing
- Performance testing
- Risk analysis
- Final validation

#### Conclusion:

Verification and validation testing were conducted on the Vital Signs Monitor Models M3 and M3A. This premarket notification submission demonstrates that Vital Signs Monitor Models M3 and M3A is substantially equivalent to the predicate device.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room --WO66-G609 Silver Spring, MD 20993-0002

FEB 1 4 2012

Edan Instruments, Inc. c/o Mr. Randy Jiang Certification Engineer 3/F-B, Nanshan Medical Equipment Park, Nanhai Rd., 1019 No. Shenzhen CHINA 518067

Re: K120144

Trade/Device Name: Vital Signs Monitor, Models M3 and M3A

Regulation Number: 21 CFR 870.1130

Regulation Name: Noninvasive blood pressure measurement system

Regulatory Class: Class II (two) Product Codes: DXN, DQA, FLL

Dated: January 16, 2012 Received: January 18, 2012

Dear Mr. Jiang:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act

or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

## **Indications for Use**

510(k) Number (if known):

K120144

Device Name: Vital Signs Monitor models M3 and M3A

The Vital Signs Monitor models M3 and M3A (hereinafter called monitor) is intended to be used for non-invasive continuous monitoring of SpO2 (oxygen saturation of the blood), NIBP (non-invasive blood pressure) and TEMP (temperature).

The monitor is intended to be used only under regular supervision of clinical personnel. It is applicable to adult, pediatric, and neonatal usage in hospitals, hospital type facilities and intra-hospital moves.

The monitor is equipped with alarms that indicate system faults (such as loose or defective electrodes), physiologic parameters that have exceeded the limits set by the operator, or both

AND/OR

Over the Counter Use \_\_\_\_.
(21 CFR Part 801 Subpart C)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)

**Division of Cardiovascular Devices**